

Art Unit: 1631

CLAIMPTO

WNP

03/02/2005

1. (Currently Amended) A synthetic or isolated nucleic acid fragment which comprises a nucleotide sequence that is identical or fully complementary to at least one of:  
(a) a first sequence starting at nucleotide 1232 and ending at nucleotide 1825 of  
SEQ ID NO: 1 or the corresponding RNA sequence, or (b) a second sequence starting at  
nucleotide 1266 and ending at nucleotide 2207 of SEQ ID NO: 1 or the corresponding RNA  
sequence.

2. (Previously Presented) The nucleic acid fragment according to claim 1, wherein said nucleotide sequence is identical or fully complementary to a second sequence starting at nucleotide 1232 and ending at nucleotide 2207 of SEQ ID NO: 1 or the corresponding RNA sequence.

47. (New) A probe for identifying *Trypanosoma cruzi*, consisting of:

(a) a nucleotide sequence selected from the group consisting of: SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 12, a nucleotide sequence starting at nucleotide 1232 and ending at nucleotide 1825 of SEQ ID NO: 1, and a nucleotide sequence starting at nucleotide 1403 and ending at nucleotide 2443 of SEQ ID NO: 1,

(b) a complement of said nucleotide sequence (a), or

(c) an RNA sequence corresponding to said nucleotide sequence (a) or said complement thereof.

11. (Currently Amended) A reagent for detecting or identifying ~~Trypanosoma cruzi~~ *Trypanosoma cruzi* in a biological sample, said reagent comprising a capture probe and a detection probe, both in accordance with ~~claim 5~~ claim 47, wherein said capture probe and said detection probe have nucleotide sequences that are different from one another.

12. (Original) The reagent according to claim 11, wherein said capture probe is attached to a solid support.

13. (Original) The reagent according to claim 12, wherein said capture probe is directly attached to said solid support.

14. (Original) The reagent according to claim 12, wherein said capture probe is indirectly attached to said solid support.

15. (Original) The reagent according to claim 11, wherein said detection probe is labeled by a marker selected from the group consisting of radioactive isotopes, enzymes capable of hydrolyzing a chromogenic, fluorogenic or luminescent substrate, chromophoric chemical compounds, fluorogenic compounds, luminescent compounds, nucleotide base analogs, and biotin.

16. (Original) The reagent according to claim 15, wherein said enzymes are selected from the group consisting of peroxidase and alkaline phosphatase.

18. (Currently Amended) A method for detection and/or identification of ~~Trypanosoma cruzi~~ Trypanosoma cruzi in a biological sample, comprising exposing denatured DNA extracted from ~~Trypanosoma cruzi~~ Trypanosoma cruzi or DNA obtained by reverse transcription of RNA extracted from ~~Trypanosoma cruzi~~ Trypanosoma cruzi to at least one probe according to ~~claim 5~~ claim 47; hybridizing said probe with said DNA if present; and detecting hybridization of said probe.

19. (Currently Amended) A method for detection and/or identification of ~~Trypanosoma cruzi~~ Trypanosoma cruzi in a biological sample, comprising exposing extracted RNA from ~~Trypanosoma cruzi~~ Trypanosoma cruzi to at least one probe according to ~~claim 5~~ claim 47; hybridizing said probe with said RNA if present; and detecting said hybridization.

27. (Currently Amended) A process for detecting and/or identifying ~~Trypanosoma cruzi~~ Trypanosoma cruzi in a biological sample, comprising:

exposing DNA or RNA from the sample to a probe under such conditions that said probe hybridizes to a nucleotide sequence identical or fully complementary to a sequence

starting at nucleotide 1232 and ending at nucleotide 2207 of SEQ ID NO: 1 or the corresponding RNA sequence; and

detecting hybridization of the probe to said DNA or RNA to detect and/or identify ~~Trypanosoma cruzi~~ Trypanosoma cruzi.

48. (New) A primer for amplifying a *Trypanosoma cruzi* nucleotide sequence, consisting of:

(a) a nucleotide sequence selected from the group consisting of: SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10 and SEQ ID NO: 12,

(b) a complement of said nucleotide sequence (a), or

(c) an RNA sequence corresponding to said nucleotide sequence (a) or said complement thereof.

49. (New) The reagent according to claim 11, further comprising at least one primer for amplifying a *Trypanosoma cruzi* nucleotide sequence, consisting of:

(a) a nucleotide sequence selected from the group consisting of: SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10 and SEQ ID NO: 12,

(b) a complement of said nucleotide sequence (a), or

(c) an RNA sequence corresponding to said nucleotide sequence (a) or said complement thereof.

50. (New) The method according to claim 18, wherein before said DNA is exposed to said probe, said DNA is amplified in the presence of an enzymatic system with at least one primer for amplifying a *Trypanosoma cruzi* nucleotide sequence, consisting of:

(a) a nucleotide sequence selected from the group consisting of: SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10 and SEQ ID NO: 12,

(b) a complement of said nucleotide sequence (a), or

(c) an RNA sequence corresponding to said nucleotide sequence (a) or said complement thereof.

51. (New) A method for detection and/or identification of *Trypanosoma cruzi* in a biological sample, comprising exposing DNA of *Trypanosoma cruzi* to at least one primer according to claim 48; and detecting amplification products.